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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,053

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

04/14/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/796,053	Applicant(s) TANAKA, HIROSHI	
	Examiner LUONG T. NGUYEN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/24/2008 have been fully considered but they are not persuasive.

In re pages 8-9, Applicant argues that Kimura fails to teach or suggest each and every claimed element. For example, independent claim 1 recites, “A photography system using a digital camera and a position detecting unit, said position detecting unit being disposed close to an object, said photography system comprising: *a first position detecting device for detecting latitude and longitude coordinates of said object to generate object position data from information on said latitude and longitude coordinates of said subject; ... wherein said digital camera includes ... a second position detecting device for detecting said latitude and longitude coordinates of said digital camera to generate digital camera position data from information on said latitude and longitude coordinates of said digital camera; a calculation processor calculating camera azimuth and object distance according to said object position data and said digital camera position data ...*”

In response, the Examiner considers that Kimura et al. does disclose these limitations. Kimura et al. discloses *a first position detecting device for detecting latitude and longitude coordinates of said object to generate object position data from information on said latitude and longitude coordinates of said subject* (GPS 245 measures the position information of the object and transmits the positional information to camera 251, figure 52, column 38, line 50 – column 39, line 10); *a second position detecting device for detecting said latitude and longitude*

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coordinates of said digital camera to generate digital camera position data from information on said latitude and longitude coordinates of said digital camera (azimuth sensor 233 detects the azimuth of a camera in a form of an angle from the magnetic north when camera is directed to an object; inclination sensor 234 detects an inclination angle of a camera when camera is directed to an object, figure 52, column 38, lines 15-39); calculation processor calculating camera azimuth (azimuth sensor 233 detects the azimuth of a camera, figure 52, column 38, lines 20-30) and object distance according to said object position data and said digital camera position data (the position of the object is obtained from position data, column 33, lines 20-50; column 34, lines 54-67; column 6, lines 15-33; column 36, lines 10-26).

Claim Objections

2. Claims 1-12 are objected to because of the following informalities:

Claim 1 (lines 11-12), “said latitude and longitude coordinates of said digital camera” should be changed to --latitude and longitude coordinates of said digital camera --.

Claim 5 (line 4), “said image file” should be changed to --an image file--.

Claim 7 (lines 10 and 12), “latitude and longitude coordinates” should be changed to --latitude and longitude coordinates of said digital camera --.

Claim 12 (line 8), “said support member” should be changed to --said support members--.

Claims 2-6 are objected as being dependent on claim 1.

Claims 8-12 are objected as being dependent on claim 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura et al. (US 5,913,078).

Regarding claim 1, Kimura et al. discloses a photography system using a digital camera (camera 251, figure 52) and a position detecting unit (GPS 245 and transmitter 246, figure 52), said position detecting unit being disposed close to an object (figure 52, column 38, lines 50-57), said photography system comprising:

a first position detecting device (GPS 245 measures the position information of the object and transmits the positional information to camera 251, figure 52, column 38, line 50 – column 39, line 10) for detecting latitude and longitude coordinates of said object to generate object position data from information on said latitude and longitude coordinates of said object; and

a transmitting device (transmitter 246, figure 52, column 38, lines 50-57) for transmitting said object position data to said digital camera,

wherein said digital camera includes:

an image pickup device (included in camera 251, figure 52) for photographing said object and outputting image data;

a receiving device (receiver 248, figure 52, column 38, lines 15-30) for receiving said object position data;

a second position detecting device (azimuth sensor 233 detects the azimuth of a camera in a form of an angle from the magnetic north when camera is directed to an object; inclination sensor 234 detects an inclination angle of a camera when camera is directed to an object, figure 52, column 38, lines 15-39) for detecting said latitude and longitude coordinates of said digital camera to generate digital camera position data from information on said latitude and longitude coordinates of said digital camera;

calculation processor for calculating camera azimuth (azimuth sensor 233 detects the azimuth of a camera, figure 52, column 38, lines 20-30) and object distance according to said object position data and said digital camera position data (the position of the object is obtained from position data, column 33, lines 20-50; column 34, lines 54-67; column 6, lines 15-33; column 36, lines 10-26);

recording processor for recording information of at least one of said latitude and longitude coordinates of said object, said latitude and longitude coordinates of said digital camera, said camera azimuth and said object distance, in association with said image data (column 38, line 66 – column 39, line10).

Regarding claim 2, Kimura et al. discloses a photography system, wherein said first position detecting device and said second position detecting device include GPS modules respectively (GPS 245, figure 53; GPS 232, figure 46).

Regarding claim 3, Kimura et al. discloses wherein said transmitting device and said receiving device transmit/receive data via radio waves (radio system, column 40, lines 1-10) or a relay system.

Regarding claim 4, Kimura et al. discloses wherein said transmitting device and said receiving device are dielectric antennas (antenna GPS receiver, column 14, lines 10-16).

Regarding claim 5, Kimura et al. discloses at least one information on said latitude and longitude coordinates of said object, said latitude and longitude coordinates of said digital camera, said camera azimuth, and said object distance, is recorded as tag information which constitutes said image file (the position information of the object is stored in memory 243, column 39, lines 1-10, and see abstract).

Regarding claims 7-11, claims 7-11 are method claims of apparatus claims 1-5, respectively. Therefore, see Examiner's comments regarding claims 1-5.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US 5,913,078) in view of Maki (US 5,884,199).

Regarding claims 6 and 12, Kimura et al. discloses said position detecting unit comprising:

a main body (GPS 245 and transmitter 246, figure 52);

a radio antenna (transmitter 246 has an antenna, figure 52) having directivity for sending a radio signal, and being mounted to said main body.

Kimura et al. fails to specifically disclose wherein said main body works as a reflector; a GPS module. However, Maki teaches the GPS antenna element 3a is mounted on a printed circuit board 3b, the printed circuit board 3b serves as a reflector. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Kimura et al. by the teaching of Mika in order to obtain a good reception of GPS radio waves (column 4, lines 15-20).

Kimura et al. and Mika fail to specifically disclose that a distance between a bottom of said support member and said radio antenna is equal to or longer than one wavelength of said radio signal. However, Official Notice is taken that it is well known in the art to mount an antenna at a height longer than one wavelength of radio signal in order to obtain a good reception of GPS radio waves. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Kimura et al. and Mika by mounting the antenna at a height longer than one wavelength of radio signal in order to obtain a good reception of GPS radio waves.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/
Supervisory Patent Examiner, Art Unit
2622

/L. T. N./
04/07/08